IC Recorder

Operating Instructions

The model number is located at the rear and the serial number is located inside the battery compartment. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product. Model No. ICD-MX20 Serial No. ___

ICD-MX20

©2005 Sony Corporation Printed in China



For the customers in the USA

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to orrect the interference by one or more of the following

 Reorient or relocate the receiving antenna Increase the separation between the equipment and

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For "Memory Stick"

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired

If you have any questions about this product, you may call: Sonv Customer Information Services Center 1-800-222-7669 or http://www.sony.com/

Declaration of Conformity Trade Name:

ICD-MX20 Sony Electronics Inc Responsible Party: 16450 W. Bernardo Dr., San Diego, CA 92127 USA Telephone Number: 858-942-2230

This device complies with part 15 of the FCC Rules Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

Notice for users

Program © 1999, 2000, 2001, 2002, 2003, 2004, 2005 Sony Documentation ©2005 Sony Corporation

All rights reserved. This manual or the software described herein, in whole or in part, may not be readable form without prior written approval from Sony

IN NO EVENT SHALL SONY CORPORATION BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, WHETHER BASED ON TORT CONTRACT, OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THIS MANUAL. THE SOFTWARE OR OTHER INFORMATION CONTAINED HEREIN OR THE USE THEREOF.

Sony Corporation reserves the right to make any modification to this manual or the information contained herein at any time without notice. The software described herein may also be governed by

the terms of a separate user license agreement. • This software is for Windows and cannot be used for

• The supplied connecting cable is for the IC recorders

ICD-MX20. You cannot connect other IC recorders.

ANY DIRECT, INCIDENTAL OR

countries EEA (European Economic Area).

Information IN NO EVENT SHALL SELLER BE LIABLE FOR

CONSEQUENTIAL DAMAGES OF ANY NATURE. OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY

The validity of the CE marking is restricted to only those countries where it is legally enforced, mainly in the

Trademarks

- "Memory Stick" and are trademarks of Sony
- "MagicGate Memory Stick" is the trademark of Sony
- "Memory Stick Duo" and MEMORY STICK DUO are trademarks of Sony Corporation.

 • "Memory Stick PRO Duo" and MEMORY STICK PRO DUD
- are trademarks of Sony Corporation.
- IBM and PC/AT are registered trademarks of International Business Machines Corporation.
- Microsoft, Windows and Outlook are trademarks of Microsoft Corporation, registered in the USA and
- other countries Copyright ©1995 Microsoft Corporation. All rights reserved.
- Portion Copyright ©1995 Microsoft Corporation • Apple and Macintosh are trademarks of Apple Computer Inc., registered in the USA and other
- Pentium is a registered trademark of Intel Corporation. NaturallySpeaking, Dragon Systems are trademarks
- owned by ScanSoft, Inc. and are registered in the United States and/or other countries • All other trademarks and registered trademarks are
- trademarks or registered trademarks of their respective holders. Furthermore, "TM" and "®" are not
- mentioned in each case in this manual. The "Digital Voice Editor" uses software modules as
- Microsoft® DirectX®

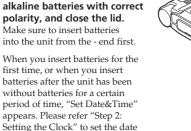
©2001 Microsoft Corporation. All rights reserved.

Step 1: Installing the Batteries

compartment lid.

▶ Getting started

2 Insert two LR03 (size AAA) alkaline batteries with correct polarity, and close the lid. Take sure to insert batteries



If the battery compartment lid is accidentally detached, attach it as

Printed on 100% recycled paper using VOC (Volatile

Troubleshooting

Before taking the unit for repair, check the following

sections. Should any problem persist after you have made these checks, consult your nearest Sony dealer.

The unit does not operate. · The batteries have been inserted with incorrect

- The batteries are weak. • The buttons are locked with the HOLD switch. (If you

press any button, "HOLD" will appear for 3 seconds.)

The "Memory Stick" is not recognized. The number of folders automatically created in the "Memory Stick" is less than 5.

• Since the "Memory Stick" contains image data or other files, the memory required for creating initial folders is insufficient. Use the Windows Explorer or other tool to delete unnecessary files or use "Format" menu of the unit to format the "Memory Stick"

No sound comes from the speaker.

The headphones are plugged in. • The volume is turned down completely

Sound comes from the speaker even when the headphones are plugged in.

• If you plug in the headphones not securely during playback, the sound may come from the speaker. Unplug the headphones and then insert them securely

The OPR indicator does not light. • The "LED" in the menu is set to "OFF". Display the menu and set the "LED" to "ON".

- You cannot start recording. • The memory is full. Erase some of the messages. Or use the Digital Voice Editor to save the IC recorder
- messages to the hard disk of your PC. You can also use the "Memory Stick" with sufficient capacity · The write-protect switch on the inserted "Memory
- Stick" is set to "LOCK". • 999 messages have already been recorded in the selected folder. Select another folder or erase some of the messages.

You cannot erase a message.

Stick" is set to "LOCK"

• The message or the folder containing the message is set to "Read-only" in the computer. Display the message or the folder using Windows Explorer and remove the check for "Read-only" under "Properties" • The write-protect switch on the inserted "Memory

You cannot add a recording or an overwrite recording to the previously recorded message.

- The remaining memory is too short. The overwritter part will be deleted after the overwriting part finishes recording. Therefore, you can only overwrite within
- the remaining recording time. • At a factory setting, "Add/Over" (additional/ overwrite recording) is set to "OFF". Display the menu and set the "Add/Over" to "Add REC" or

Recording is interrupted.

 The advanced VOR (Voice Operated Recording) function is activated. Set "VOR" in the menu to "OFF" Recording is interrupted (when recording from

an external device). If you use an audio connecting cable without a resistor to connect the sound source to the IC recorder, sound

may be recorded interrupted. Make sure to use a sistance audio connecting cable. Noise is heard.

An object, such as your finger, etc., accidentally rubbed or scratched the unit during recording so that

- noise was recorded. • The unit was placed near an AC power source, a fluorescent lamp or a mobile phone during recording
- or playback. Plug of the connected microphone was dirty when
- recording. Clean the plug • Headphones plug is dirty. Clean the plug.

Recording level is low.

• "Mic Sense" (microphone sensitivity) is set to "Low". Display the menu and set "Mic Sense" to "High" If it is difficult to hear small sound of a recorded message, slide the VOICE UP switch to "ON". Playback sound may become more audible.

in the menu and set the clock.

- Playback speed is too fast or too slow. • The playback speed is adjusted in the "DPC" in the menu. Slide the DPC switch to "OFF" or display the
- "DPC" in the menu and adjust the playback speed.
- "--Y--M--D" or "--:--" is displayed. You have not set the clock. Display the "Date&Time"
- "--Y--M--D" or "--:-" is displayed as the
- recorded date. • The date and time of recording will not be displayed if

you recorded the message when the clock was not set. Display the "Date&Time" in the menu and set the

There are fewer menu items in the menu mode.

• There are some menu items which are not displayed while the set is in recording or playback mode.

A character in a folder or message name is

displayed as " \square ". • The unit cannot support and display some characters which are entered using the supplied "Digital Voice

Messages are not sorted in order of the number of priority marks in a folder.

• Unless you sort messages using the supplied "Digital

Voice Editor" software, messages are displayed in the

unit in the same way as specified in the computer. Sort

again in the order of the number of priority marks in

the computer using the supplied "Digital Voice Editor" software The remaining time displayed in the display

window is shorter than that displayed in the supplied "Digital Voice Editor" software. • The unit requires a certain amount of memory for system operation. That amount is subtracted from the remaining time, which is the reason for the difference.

The battery life is short. • The battery life mentioned in "Step 1: Installing the Batteries" is based on playback through internal speaker with the medium volume level (using Sony alkaline batteries LR03(SG)). The battery life may shorten depending on the operation of the unit

"ACCESS" display does not disappear. • If the unit is required to process excessive amount of

data, "ACCESS" may be displayed for an extended period of time. This is not a malfunction of the unit. Wait until the message disappears The unit does not operate correctly.

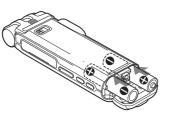
Take out the batteries and insert them again with

You cannot connect the unit to the PC. • Refer to the "Digital Voice Editor 2" operating

Please note that recorded messages may be erased during service or repair work.

1 Slide and open the battery

into the unit from the - end first. When you insert batteries for the first time, or when you insert



this unit.

memory)

• Do not charge dry batteries.

• When you are not going to use the

remove the batteries to prevent

damage from battery leakage and

When you insert the batteries

for the first time after

purchasing (initializing the

"ACCESS" appears in the display

window and the internal memory is

initialized automatically to create 5

folders (FOLDER01 to FOLDER05).

Notes while "ACCESS" appears

The unit is accessing data while

accessing, do not remove the

batteries or AC adaptor (not

· If the unit is required to process

excessive amount of data,

the message disappears

Note on setting the clock

Set the clock while the set is in the

To display the clock setting

window and current time

You can display the clock setting

1 Press ◀ (MENU) to display the

2 Press **▲/▼** to select **⊕** (Preferences)

The current time is displayed in the

and then press ▶■.

3 Press ▲/▼ to select "Date&Time".

right bottom of the display

4To set the clock, press **▶** ■ to

the "Step 2: Setting the Clock".

This unit does not have a power on/

Maximum recording time*

The maximum recording time of all

the folders is as follows. You can

record messages for the maximur

ording time in a single folder.

Approx. 1 hr. 25 min.

Approx. 2 hr. 45 min.

Approx. 4 hr. 20 min.

ST: Standard play stereo recording

recording mode /SP: Standard play

mode/STLP: Long play stereo

monaural recording mode/LP:

Long play monaural recording

The maximum number of the

You can create the maximum of 340

folders each in the built-in memory

• To record in better sound quality,

• Before making a long recording, be

• The maximum recording time and

the number of messages you can

• To avoid replacing batteries during

built-in microphone if you connect

an external microphone to the \P

long time recording, use the AC

power adaptor (not supplied).

• You cannot record through the

(microphone) connector.

Expanding the memory

You can expand the memory by

MEMORY STICK slot. (See the

Switching the drives

2 Press ◀.

inserting a "Memory Stick Duo" or

"Memory Stick PRO Duo" into the

and the "Memory Stick" by switching

1 Press ► (♠) to display the folders

3 Press **△** or **▼** to select the "Memory

Stick" drive (or the built-in

"Memory Stick" drive (🖰)

The folders of the selected drive are

displayed, where you can select one

(If you keep pressing \blacktriangle or \blacktriangledown , the

display switches to the folders of

automatically in response to

the sound — Advanced VOR

Set "VOR" in the menu to "ON"

lights in red or orange, do not

remove the batteries or the AC

may damage the data.

such as your finger, etc.,

unit during recording

adaptor (not supplied). Doing so

· Noise may be recorded if an object

accidentally rubs or scratches the

• While the OPR indicator flashes or

memory drive (____).

□ C☐FOLDER01

a FOLDER03

[000/00

by pressing \blacktriangle or \blacktriangledown .

Starting recording

Notes on recording

another drive.)

function

4 Press **▶**■.

make varies depending on the

select the ST or STLP mode.

folders when each folder

contains one message

and the "Memory Stick".

conditions of use.

Notes before recording

Approx. 11 hr. 45 min.

(built-in memory)

Recording modes**

* In continuous recording

**Recording modes:

off switch. The display is shown at all

and follow the steps 1 through 4 of

window.

▶ REC Mode

Display

🔁 Beep

Date&Time

REC Mode

Play Mode

Priority

List View

🔏 VOR

∰ Mic Sense

check the current time

window to set the date and time or

"ACCESS" appears in the display

window or the OPR indicator lights

or flashes in red or orange. While

supplied). Doing so may damage

"ACCESS" may be displayed for an

extended period of time. This is not

a malfunction of the unit. Wait until

unit for an extended period of time

Replacing the batteries

ery indicator on the display window shows the battery condition: Replace both of the two batteries with new ones. "Replace Batteries" appears and the unit will stop operation.

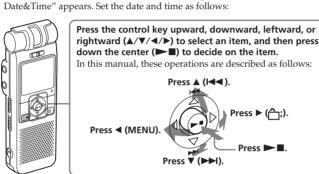
Recording mode:	ST	STLP	SP	LP
In recording:	8 hr.	9 hr. 30 min.	9 hr. 30 min.	10 hr. 30 min.
In playback:	8 hr.	9 hr.	9 hr.	9 hr.

- In continuous recording/playback In approximate hours and minutes
- When playing back through the internal speaker with the medium volume level * The battery life may shorten depending on the operation of the unit.

Using on house current Connect the AC power adaptor (not To DC IN 3V jack supplied) to the DC IN 3V jack of the unit and to the wall outlet. Do not use AC power adaptor any other AC power adaptor.

Step 2: Setting the Clock

You need to set the clock to use the alarm function or record the date and time. When you insert batteries for the first time, or when you insert batteries after the unit has been without batteries for a certain period of time, "Set



1 Press ▲/▼ to select the digits for the year. ▲: to decrease the number

2 Press ►■. The month digits will flash 3 Repeat steps 1 and 2 to set the month, day, hour, and then minutes in sequence. To select a previous or next item Press ◀ for the previous item or ▶ for the next

If you do not press ▶■ for more than one minute the clock setting mode is cancelled and the window will return to normal display. 4 Press ■STOP to return to the normal

15:**30** 000/000 -v--m--d --:

Date&Time

0:00

Date&Time

05 y 5 m 15 d

-:--:-

05y 1m 1d

▶Basic Operations

display.

Recording Messages

You can record the maximum of 999 messages in each folder of the initially 5 folders (FOLDER01 to FOLDER05). In all the folders of the built-in memory, you can record the maximum of 1,012 messages. Since a newly recorded message is automatically added behind the last recorded

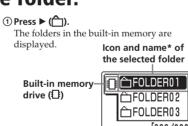
message, you can start recording quickly without searching for the end of the last





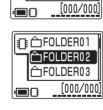
Select the recording mode. For how to select the recording mode, see "Operating the Menu".



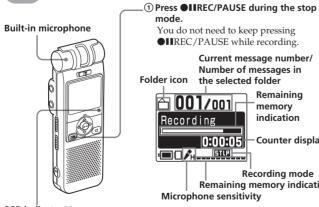


* You can display a long folder name by scrolling the cursor.

② Press ▲ or ▼ to select the folder in which you wish to record messages ③Press ►■



Start recording.



2 Speak to the built-in microphone (lights in red during recording.)

**When the "LED" in the m	enu is set to "OFF", the OPR indicator turns off. Do this
stop recording	Press STOP. The unit stops at the beginning of the current recording. If you do not change the folder after y stop recording, the next time you record you will record in the same folder.
pause recording*	Press •IIREC/PAUSE. During recording pause, the OPR indicator flashered and "REC Pause" flashes in the display wind
release pause and resume recording	Press •IIREC/PAUSE. Recording resumes from that point.
listen to the current recording	Press ■STOP to stop recording, then press ▶■.
review the current recording instantly	Press ►■ during recording.
review during recording	Keep pressing ▲ (►) during recording or

 $^{^{\}ast}\,$ About one hour after you pause recording, recording pause is automatically released and the unit goes into the stop mode.

recording pause.

Recording stops and you can search backwards

while listening to fast playback sound. After you

You can add an overwrite recording from that point.

release the key, playback starts from that point.

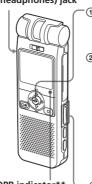
Notes on batteries

When playing back a previously recorded message, start from Step 1. When playing back a message you have just finished recording, start from Step @-2.

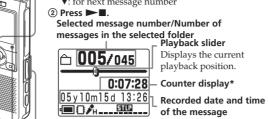
Playing Back Messages



Select the message and start playback.



 Press ▲ or ▼ to display the desired message ▲: for previous message number ▼: for next message number



OPR indicator** Adjust the volume with VOLUME +/-(lights in green during playback.) The display selected with the



"Display" in the menu appears.

**When the "LED" in the menu is set to "OFF", the OPR

The unit plays all the messages in a folder continuously and stops at the beginning of the last message in the folder. (You change the "Play Mode" in the menu so that the unit plays a message and then stop at the beginning of the next

Do this

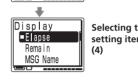
stop at the current position	Press ► or ■STOP. To resume playback from that point, press ► again.	
go back to the beginning of the current message	Press ▲ once.*	
skip to the next message	Press ▼ once.*	
go back to previous messages/skip to succeeding messages	Press ▲ or ▼ repeatedly. (During stop mode, keep the key pressed to skip the messages continuously.)	
* These operations are for when "E	asy Search" in the menu is set to "OFF".	

Operating the Menu

During stop, playback or recording, you can use the menu to change the operation modes in playback and recording, display mode, or other settings Display the menu and change the settings as follows:

Π	То	Do this	
1	enter the menu mode.	Press ◀ (MENU).	
2	select the desired menu ($\rlap{\ \ } / \rlap{\ \ } / \rlap{\ \ } / \rlap{\ \ \ } / \rlap{\ \ \ } / \rlap{\ \ \ \ } /$.	. Press ▲/▼ and press ▶■.	
3	select the desired menu item.	Press ▲/▼ and press ▶■.	
	go back to the previous step.	Press $\blacktriangle/\blacktriangledown$ to select " \Longrightarrow " and press $\blacktriangleright \blacksquare$. (If " \Longrightarrow " does not appear, press \blacktriangleleft .)	
4	select the setting item.	Press ▲/▼ and press ▶■ .	
5	exit the menu mode.	Press ■STOP.	
	you do not press the key or button for one m ncelled and the window will return to norma		

 Date&Time [Elapsed Time]





Stop/Play/Rec** Menu items Settings (*: Initial setting) ந Record/play menu You can set the recording mode (bit rate): You can record with high-quality stereo sound. (48 kbps STLP: You can record with stereo sound for longer time. (24 kbps) OK/-/-You can record with better sound (monaural sound). (16 kbps)

Note: When the DIRECTNL switch is set to "ON", a message will be recorded in monaural even in the "ST" or "STLP" recording mode. To record at meetings or in a quiet and/or spacious place. To record dictation or in a noisy place. You can activate or disable the VOR (Voice Operated Recording) function for VOR eliminating recording from soundless period.: Recording starts when the unit detects sound and "VOR" is displayed. Recording pauses when no sound is heard and "VOR Pause" is displayed OK/-/OK The VOR function is disabled. Normal recording operation is selected. Note: VOR function is affected by the sound around you. Set the "Mic Sense" according to the recording conditions. If recording is not satisfactory after you have changed the microphone sensitivity, or for important recording, set the "VOR" to "OFF"

You can record for longer time (monaural sound), (8 kbps)

Add/Over You can enable or disable the adding or overwrite recording mode: You cannot add a recording to avoid erasing a message by accidental OK/-/-Add REC: You can adds a recording to a previously recorded message during playback. Overwrite: You can adds an overwrite recording to a previously recorded message during playback. DPC You can set the playback speed: Messages will be played back at normal speed. OFF*: OK/OK/-ON: You can adjust the speed of the playback between twice the normal speed (+100%) and half the normal speed (-50%) You can activate or disable the easy search function Easy Search You can go back for approx. 3 seconds by pressing \blacktriangle ($\blacktriangleright\blacktriangleleft$), or advance for approx. 10 seconds by pressing \blacktriangledown ($\blacktriangleright\blacktriangleright$). ON: OK/OK/-

You can go back or forward the messages by pressing ▲/▼ (► ► I)

You can set the playback mode when you press ►■:

Cont Play*: The unit plays back all messages in a folder continuou

You can add priority marks (A) to the currently selected message

One MSG: The unit plays back one message and then stops at the beginning of the next The unit plays back a message repeatedly until you press ▶■ or ■STOP. "Repeat MSG" and "🖚" will be displayed. T Erase menu Erase a MSG You can erase the currently selected message. OK/OK/-(See the reverse side. Erase AllMSG You can erase all the messages in the selected folder. OK/-/-(See the reverse side.) Erase Folder You can erase the selected folder and the messages contained in the folder. OK/-/-Format You can format a "Memory Stick". (See the reverse side.) OK/-/-Edit menu

Thority	Usually th	e recorded messages are lined up in the order of recording. /AA/AAA) (See the reverse side.)	OK/OK/-
Move MSG		nove the currently selected message to the desired folder.	OK/OK/-
Alarm		et the alarm to the currently selected message. everse side.)	OK/-/-
Add Folder	You can add a new folder to the end of the current drive. (See the reverse side.)		OK/-/-
Edit Folder	You can change the icon and name of the currently selected folder. (See the reverse side.)		OK/-/-
⊞ Preferen	ces menu		
Display	You can cl Elapse: Remain: Name:	hange the display mode on the display window. Displays the elapsed playback/recording time of one message (counter). Displays the remaining time indication. Displays the message name (title) if it is specified with the supplied Digital Voice Editor software.	OK/OK/OK
Date&Time		et the clock manually or automatically: : If the unit is connected to a PC while the supplied Digital Voice Editor is operating, the clock is automatically set according to the PC internal clock. Displays the window to set the clock manually (05Y1M1D*). (See "Step 2: Setting the Clock".)	OK/-/-
Веер	You can to ON*: OFF:	urn on or off the beep. A beep will sound to indicate that operation has been accepted. No beep sound will be heard except for the alarm.	OK/OK/OK
LED		urn on or off the OPR (operation) indicator during operation. The OPR indicator lights or flashes during operations such as recording or playback. The OPR indicator turns off even during operation. (Even if you set the LED to "OFF", the indicator lights when the unit is connected to the PC.)	OK/-/OK
Backlight	You can to ON*: OFF:	urn on or off the backlight on the display window during operation. The backlight on the display window lights during operation. The backlight on the display window turns off during operation.	OK/OK/OK

You can select the list view or one message view in the stop mode.

A message is displayed in the stop mode.

"OK" shows the setting can be changed and "-" shows the setting cannot be changed

List of the messages is displayed in the stop mode

**Displays whether you can change the setting in each operation mode (Stop: stop mode/Play: playback mode/Rec: recording mode)

during playback (Cue/Review • To search forward (cue): Keep ▼ pressed during playback and release the key at the point you

wish to resume playback

wish to resume playback.

starts to search at higher speed.

be displayed, regardless of the

display mode setting.

To search backward (review):

Keep \blacktriangle pressed during playback

If you keep **▼** or **▲** pressed, the unit

During cue/review, the counter will

F When playback or fast playback

is done to the end of the last

messageWhen fast playback is done to the

End" flashes for 5 seconds, (You

"Message End" is flashing, the

messages are played back rapidly

and normal playback will start at

flashing and the OPR indicator goes

the point you release the key.

• When "Message End" stops

off, the unit will stop at the

beginning of the last message

• If the last message is long and you

wish to start playback at a later par

of the message, keep ▼ pressed to

play back the message to the end

and then press ▲ while "Message

· For messages other than the last

Listening in better sound

not supplied) to the Ω

(headphones) jack

desired point.

desired point.

End" is flashing to go back to the

one, go to the beginning of the next

message and play backward to the

You can enjoy better sound quality as

• To listen from headphones: Connec

(headphones) jack. The built-in

•To listen from an external speaker

speaker (not supplied) to the Ω

How the display changes in

Entering the

menu mode (1)

Selecting the

desired menu

(2, 3)

the menu mode

▶ REC Mode

∰ Mic Sense **≝** VOR

⊉[Display

[•■⊕L

speaker will be automatically

Connect an active or passive

the stereo headphones (supplied or

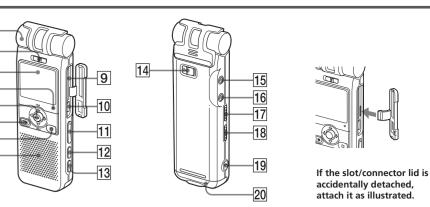
ullet If you keep lacktriangle pressed while

end of the last message, "Message

cannot hear the playback sound.)

and release the key at the point you

Identifying the front and rear panels of the unit Searching forward/backward



14 HOLD switch

displayed.

Index to Parts and Controls

1 Built-in monaural/stereo microphone (directional/all-directional) You can set the directivity with the DIRECTNL switch 2, and sensitivity with the "Mic Sense" in

2 DIRECTNL (directional) ON (MONO)/OFF switch Slide the switch to set the directivity of the built-in microphone 1 as follows:

ON (MONO): To record a sound centering on a specific direction in monaural. Use this position when you record a sound at a conference/ meeting or in a spacious place etc. OFF: To record a sound not centering on a specific direction (all-directional recording).

• The DIRECTNL switch is set to "ON", sound is recorded in monaural even if you select ST or STLP • In the ST and STLP mode, sound is recorded in higher quality sound thanks to their higher bit rates even in

3 Display window For the details, see "Using the display window"

the monaural recording

4 OPR (operation) indicator The indicator lights in red during recording or in green during playback. It flashes in red during recording pause. During accessing the data, it lights or flashes in red or orange. You can turn off the indicator with the "LED" in the menu.

 \blacktriangleleft (MENU)/ \blacktriangleright ($\stackrel{\triangle}{\square}$: folder) \blacktriangle (\blacktriangleright \blacktriangleleft : review)/ \blacktriangledown (\blacktriangleright \blacktriangleright): fast forward)/►■ (play/stop•enter)

Press here to start and pause recording 7 ■STOP button Press here to stop operation.

6 ●IIREC (record) /PAUSE button

5 Control key

8 Speake

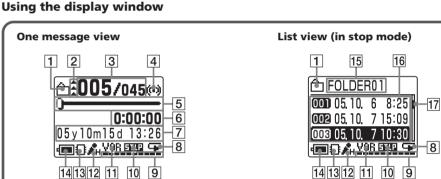
PRO Duo" here.

Sound is heard when no headphones or active speaker are connected. MEMORY STICK slot Insert the "Memory Stick Duo" or "Memory Stick

10 USB connector Use the USB cable to connect a PC here

11 VOLUME (volume) +/- button Adjust the playback sound with the button. 12 DIVIDE button

Press to divide a message during playback. 13 A-B (repeat) button Press to specify the beginning and ending points of the portion to be played back repeatedly.



1 Folder icon

change the icon with the "Edit Folder" in the menu. 2 Priority marks

Displays the priority marks specified with the "Priority" with the menu. You can renumber the messages in the order of their priority. 3 Selected message number /Total number of

Alarm indicator Appears when the alarm is set for a message. 5 Playback slider Displays the current playback position.

e messages in the selected folder

6 Counter (Elapsed time)/Remaining time / Message name indication The display mode selected with the "Display" in the **Elapse**: Displays the elapsed playback/recording time of one message (counter).

Remain: Displays the remaining time of the message in the playback -0:07:28 mode, and the remaining recordable time 05y10m15d 13:26 in the stop and recording Name: Displays the message name (title) if it is specified 005/045

with the supplied Digital Meeting Voice Editor. (Some |05y10m15d 13:26 characters that are not compatible with the unit may not be displayed.) 7 Recorded date and time indication

the current message are displayed

9 Remaining memory indicator

Displays the remaining memory

8 Repeat play indicator Appears when "Repeat" (one message repeat playback mode) is selected with the "Play Mode" in the menu.

Recorded year, month, day, hours, and minutes of

• During recording, the indicator decreases one by When the remaining recording time reaches 5 minutes, the indicator flashes • When the remaining time reaches 1 minute, the Recording indication 6 will flash =-0:00:59 regardless of the display

Remaining memory tim · When the memory is full, recording automatically stops and "Memory Full" will be displayed with an alarm sound. To continue recording, first erase some of the messages.

memory time is displayed excluding the data. You can check the remaining memory by selecting "Remain" in the "Display" menu. • When you set the "Beep" in the menu to "OFF", an alarm sound (beep) does not sound 10 Recording mode indication

• If data other than sound data is saved, the remaining

Displays the current recording mode specified with the "REC Mode" in the menu: • ST: Standard play stereo recording mode STLP: Long play stereo recording mode • SP: Standard play monaural recording mode

• LP: Long play monaural recording mode

11 VOR (Voice Operated Recording) indicator

Appears when the "VOR" in the menu is set to "ON" and the voice operated recording is activated.

OK/OK/-

16 (microphone) jack (PLUG IN POWER) You can connect an external microphone here. When an external microphone is connected, the built-in microphone is automatically cut off.

15 (headphones) jack

You can play back a message at a higher or lower speed as follows: ON: "Fast Play" or "Slow Play" will be displayed

To prevent accidental operation, slide this switch to

"ON". "HOLD" will appear for 3 seconds, indicating

When the HOLD function is activated during stop,

Even if the HOLD function is activated, you can stop the

alarm playback. To stop the alarm or playback, press

microphone, connect headphones supplied or not

upplied here. You can adjust the volume with

If you turn up the volume excessively or place the

headphones near the microphone while monitoring

the headphones, causing acoustic feedback (howling

recording, the microphone may pick up the sound from

VOLUME +/- 11, but the recording level is fixed.

■STOP. (You cannot stop usual playback.)

To monitor the recording from the built-in

all the display will be turned off after "HOLD" is

To cancel the HOLD function

Slide the HOLD switch to "OFF"

that all the functions of the buttons are locked.

with the "DPC" in the menu (between twice the normal speed (+100%) and half the normal speed (-50%)). OFF: A message is played back at the normal speed.

18 VOICE UP (Digital Voice Up) ON/OFF switch

more audible by enabling the Digital Voice Up

You can make the playback sound well-balanced and

low-level part of a recorded message is amplified so that the overall recording is adjusted to its optimum level.

Depending on the area you purchased the unit, the Digital Voice Up switch name shown on the unit may

19 Slit for a handstrap

AAA) alkaline batteries.

You can attach a handstrap (not supplied) here. 20 Battery compartment /DC IN 3V jack Open the compartment lid and insert two LR03 (size

One message view **⊕£005/**045₩ 05v10m15d 13:26

0:07:28

05y10m15d 13:26

Displays the icon of the current folder. You can

specified with the "Mic Sense" in the menu: • H (High): To record at a meeting or in a quiet/ spacious place.

Displays the current drive: ☐: Built-in memory drive "Memory Stick" drive

16 Messages list

Displays the remaining battery volume. When the AC power adaptor (not supplied) is connected, the indicator does not appear. 15 Folder name indication

12 Microphone sensitivity indication

folder when "List View" in the menu is set to "ON". The number and recorded date/time of each message is displayed. You can scroll the messages with **▲/**▼. 17 Scroll bar

Displays the current location of the displayed messages among the whole messages in the current

press ►■. The Preferences menu is displayed.

> List View =OFF ON

changed. 6 Press ■STOP to return to the normal display.



The effect of the back light of the display window may be

4 Press ►■. <mark>=</mark>List View] The "List View" setting window is displayed. **5** Press **△**/**▼** to select "ON" (list view) or "OFF" (one message

view) and then press The setting will be

Displays the name of the current folder. You can

change the icon with the "Edit Folder" in the menu.

Displays the list of the three messages in the current

Switching the one message view and the list view You can choose how the messages will be displayed on

• L (Low): To record for dictation or in a noisy 13 Drive indication 14 Remaining battery indicator

Displays the current microphone sensitivity

2 Press **▲**/▼ to select ⊕ (Preferences) and then Backlight

the stop mode between list view and one message view as 1 Press **◄** (MENU). The menu window is displayed.

3 Press **△**/**▼** to select "List

17 DPC ON/OFF switch and a message is played 0:00:30 back at the speed specified

function as follows: ON: Digital Voice Up function is activated. Inaudible OFF: A message is played back without Digital Voice Up function.

You can add a recording to the message being played

· At a factory setting, you cannot add a recording not to erase the message by accidental operation. To add or overwrite a recording, set the "Add/Over" in the menu to "Add REC" or "Overwrite". • The added or overwritten portion of a message will be recorded in the same recording mode (ST, STLP, SP or LP)

as the original message, regardless of the current recording mode setting. • You cannot add or overwrite a recording if the remaining memory is not long enough. For more information, see

"Troubleshooting" When "Add REC" is selected in the menu The added recording will be placed after the current message and counted as a part of the message.

Message 3 Message 4 Message 3 Message 4 a recording Added recording

When "Overwrite" is selected in the menu You can add an overwrite recording after the selected point in a recorded message. The part of the message after the selected point is deleted.

The starting point of an overwrite recording Message 3 Message 4 The deleted par **__** f Message 3 Message 4 Message 3

Added overwrite recording in Message 3

Add REC?

05y1Um15d 13:26

0:07:28

Add REC

1 During playback, press ● IIREC/PAUSE briefly The "Add REC?" or

"Overwrite?" will appear and the unit stops in the recording stand-by mode

2 While the "Add REC?" or "Overwrite?" appears, press •IIREC/PAUSE The OPR indicator will turn in red. An add or overwrite recording starts.

3 Press ■STOP to stop the recording.

Recording with an External

Recording with an external microphone Connect an external microphone to the \(^{\chi}\) (microphone)

Microphone or Other Equipment

When you connect an external microphone, the built-in microphone is automatically cut off. When a plug in power type microphone is connected, power is automatically supplied to the microphone from the IC recorder.

mini-plug

To the 🔨

connecting

cable with

attenuator

not supplied)

(stereo)



(microphone) jack **☞** Recommended types of microphones You can use the ECM-CS10 Sony electret condenser microphone (not supplied).

Recording from other equipment To record sound of other equipment with the IC recorder, connect the \(^{\scrimthtered}\) (microphone) jack of the IC recorder to the earphone jack of other equipment (tape recorder etc.) by

using a resistance audio connecting cable. Before you start recording, set the microphone sensitivity by setting the "Mic Sense" in the menu to "High". If you use an audio connecting cable without a resistor, sound

may be recorded interrupted. Make sure to use a resistance audio connecting cable Recording with other equipment

To record the sound of the IC recorder with other equipment, connect the Ω (headphones) jack of the IC recorder to the audio or line input connector (stereo miniplug) of other equipment. To the audio or line

input connector (stereo

Tape recorder, etc To the () (headphones)

• Make sure that the plugs are connected securely. • We recommend you make a trial recording to check the connections and volume control. • When connecting equipment other than Sony's, refer to the instruction manual of the equipment

►Various Ways of Playback

Locating quickly the point you wish to start playback (Easy Search)

You can quickly locate the point you wish to start playback by pressing ▲ (►►)/▼ (►►) repeatedly during playback. This function is useful when locating a desired point in a long recording. Set "Easy Search" in the menu as follows:

0:07:28

0:07:28

0:07:28

ON: You can go back for approx. 3 seconds by pressing ▲ (►), or advance for approx. 10 seconds by pressing ▼ (►►I).

OFF*: You can go back or forward the messages by pressing **▲/▼** (**I◄◄ /▶►I**).

Playing back a message repeatedly — Repeat Play

Repeating a message

The "and "Repeat MSG"

Set "Play Mode" in the menu to "Repeat" and press ▶■. will be displayed and the selected message will be played back repeatedly.

To resume normal playback Set "Play Mode" in the menu to "One MSG" or "Cont Play".

Playing back the specified section

repeatedly — A-B Repeat While playing back a message, you can set the start (A) and end (B) points for a section you wish to play

1 During playback, press A-B (repeat) briefly. The starting point (A) of the section you wish to play repeatedly is set. "A-B B?"

2 During playback, press A-B (repeat) briefly

The finishing point (B) of the section is set. "A-B Repeat" is displayed and the specified section is played back repeatedly.

To resume normal playback

To stop A-B Repeat playback Press STOP

• You cannot set A-B Repeat for a section that overlaps two or • If you do not set the finishing point (B), the finishing point is automatically set at the end (or the beginning) of the

You can sound an alarm and start playback of a selected nessage at a desired time. You can have the message played back at a specified date, once every week, or the same time everyday You can also sound the alarm without playing back a

When the clock is not set or no messages are recorded, you

1 Display the message you

want to set the alarm.

press ►■.

④ Press ►■.

Playing Back a Message at a

Desired Time with an Alarm

0:00:00 |05y10m15d 13:26

2 Enter the alarm setting Priority ① Press **◄** (MENU), and Move MSG select 🔌 (Edit) by Alarm pressing $\blacktriangle/\blacktriangledown$, and then OFF OFF ② Press ▲/▼ to select "Alarm" and press ▶■. Alarm The alarm setting mode

will be displayed. ON ③ Press **▲**/▼ to select If "ON" has already been selected, follow the next ■Date The window to set the

alarm date will be MON displayed. **3** Set the alarm date. To play back on a desired ① Press ▶■ while "DATE" **05** y 1 m 1 d

is selected 0:00 The year digits will be ____ ② Press ▲ or ▼ to select Alarm the year digits and press 05 y 10m The month digits will be 0:00 selected. (3) Set the month and day

in sequences. To play back once a week lAlarm Press ▲ or ▼ to select the day of the week, and press -SUN

To play back at the same Alarm Press ▲ or ▼ to select "DAILY", and press ▶■.

SAT Daily 4 Set the alarm time. ||Alarm Press ▲ or ▼ to select the hour digits and press 05 y 10 m 15 d 0:00 The minute digits will

|Alarm

15:**30**

05 y 10 m 15 d

■Beep&Play

Beep

MON

② Press ▲ or ▼ to select the minute digits and press ►■.

You cannot set the alarm at a previously set date and time on another message in the built-in memory or "Memory

5 Select the alarm playback. Press ▲ or ▼ to select the alarm sound either from "Beep&Play" (for starting playback after the alarm) o "Beep" (for only the alarm).

6 Press ►■. The alarm setting is completed

7 Press ■STOP to exit the 005/045@ "(•)" is displayed when the message having an alarm setting is displayed in one message view.

0:00:00 05y10m15d 13:26 STUP When the alarm time comes The alarm will sound for about 10 seconds and the selected message will be played back. (If you have selected "Beep", only the alarm will sound.)

When the playback ends, the unit will stop automatically at the beginning of that message. To listen to the same message again, press ►■.

To stop alarm Press STOP while the alarm sound is heard. You can stop even when the HOLD function is activated.

To cancel the alarm setting or change the alarm Select "OFF" in the steps ③-2, and then press ▶■.

• If the alarm time comes while another message is being played back with an alarm, the playback stops and the new

sage will be played back.

• If the alarm time comes during recording, alarm will sound for 10 seconds after the recording is finished and playback begins. "(*)" will flash when the alarm time comes • If more than one alarm time comes during recording, only

the first message will be played back. • When the alarm time comes when the unit is in the menu mode, alarm will sound and the menu mode will be

• If you erase the message you set the alarm to play back, the alarm setting will be cancelled. If you divide a message with the playback alarm, playback

will stop at the point you divided a message.

• You can adjust the playback volume with VOLUME +/-. • If the alarm time comes during erasing, alarm will sound for 0 seconds after the erasing is finished and playback begins

• Alarm setting will not be cancelled after the alarm playback

finishes. To cancel alarm setting, set "Alarm" to "OFF".

▶Editing Messages

Erasing Messages

Once a recording has been erased, you cannot retrieve it.

Erasing messages one by one You can erase unnecessary messages one by one. When a message is erased, the remaining messages will advance and be renumbered so that there will be no space between messages.

Before erasing Erase Message 3 Message 1 | Message 2 | Message 3 | Message 4 | Message 5 Message 1 | Message 2 | Message 3 | Message 4

After erasing Remaining messages are

1 Display the message you want to erase. 0:00:00 |05y10m10d 10:30 2 Press ◀ (MENU), and Erase a MSG select m (Erase) by pressing **▲**/**▼**, and then EraseAlIMSG press ►■. The cursor moves to the Erase menu.

3 Press **▲**/**▼** to select "Erase Erase a MSG a MSG" and press ►■. Execute The window for erasing a message is displayed. Cancel JU -----4 Press **▲**/**▼** to select

<u>rase a MSG</u> "Execute" and press ▶■. Execute? Yes displayed. No 5 Press **▲**/**▼** to select "Yes" Erase a MSG and press ►■. The message is erased Erasing

the normal display. The remaining messages w be renumbered. (For example, if you erase Message 3, Message 4 will be renumbered as Message 3. When erasing is completed, the unit will stop at the beginning of the following

message.)

To cancel erasing

Press STOP before step 5

section to erase the message.

To erase a message partially

that you want to erase.

pressing **▲/▼**, and then

The cursor moves to the

3 Press **A**/**▼** to select "Erase

AllMSG" and press ►■.

The window for erasing all

the messages in a folder is

"Execute" and press ►■

The confirmation window is

5 Press **▲**/▼ to select "Yes"

2 Press ◀ (MENU), and

press - .

Erase menu.

displayed.

displayed.

4 Press **▲**/▼ to select

select 📺 (Erase) by

First divide the message and then follow the steps on this

1 Display the folder or a message in the folder

Erasing all messages in a folder

You can erase all recorded messages in a folder.

6 Press ■STOP to return to

0:00:00

🖺 Erase a MSG

EraseAlIMS

≦ EraseFolder

EraseAlIMSG

Execute

No

Cancel

003/009 05y10m25d 10:00

Usually the recorded messages are lined up in the order By adding priority mark(s) (A) to important messages, you can renumber the messages in the order of their priority. There are four levels, "AAA" (the most important), "▲▲", "▲", and "None" (no priority mark) You can add priority marks both in the stop mode and in the playback mode. **1** Display the message you

0:00:00 |05y10m15d 13:26 ♪ Priority

select 🖉 (Edit) by pressing 🛅 ▲/▼, and then press ▶■. Move MSG The cursor moves to the Edit Alarm œ:: **3** Press **△**/**▼** to select "Priority" and press ►■. ■None priority marks is displayed. \blacksquare 4 Press **A**/▼ to select the Priority

number of the priority marks with which you want to mark. 5 Press ►■.

want to mark.

EraseAlIMSG Execute? Messages with priority

using the software

and press ►■. All the recorded mess contained in the folder are erased. The folder itself will not be erased 6 Press ■STOP to exit the menu mode. To cancel erasing

If a folder contains a lot of messages, it may take long to erase all the messages.

Dividing a Message

Press ■STOP before step 4.

You can divide a message during recording or playback so that the message is divided into two and the new $% \left\{ 1\right\} =\left\{ 1\right\}$ nessage number is added to the divided message. By dividing a message, you can easily find the point you want to play back when you make a long recording such as a meeting.

You can divide messages until the total number of messages in the folder becomes 999. • Due to the recording system of an IC recorder, you may not

be able to divide a message in some cases. For the details, "Troubleshooting". If you divide a message with priority mark(s), priority mark(s) will be added to both parts of the divided message. • The recorded date and time (the starting date and time of recording) of the divided messages are identical to the original message.

• If you divide a named message, the both parts of the divided messages will have the same message name. • If you divide a message with an alarm setting, the alarm etting remains only with the former message divided If you divide a message to which the bookmark is set with the supplied Digital Voice Editor, the bookmark is erased

While recording or playing back a message, press DIVIDE at the point you want to divide.

 When you press DIVIDE during recording The new message number is added at the point you pressed the button, and "New MSG REC" appears for 3 seconds. The message will be divided into two; however, the messages will be recorded without a break.

New MSG REC 0:07:28 ·■□/_H SIC

→Recording continues Message 1 Message 2 Message 3 A message is divided.

You can divide a message during recording pause When you press DIVIDE during playback: The message is divided into to ° 🗀 003/005 at the point you pressed the button, and "Dividing" appears

0:07:28 for 3 seconds. The message Dividing numbers of the following messages will increase by one. Message 2 Message 3 A message is divided. Message 1 Message 2 Message 3 Message 4

The message numbers increase. To play the divided message Press ▲ or ▼ to display the message number as the divided messages each have message numbers.

Moving Messages to a Different Folder — Move Function

You can move the recorded messages to another folder. When you move a message to another folder, the one in

the previous folder will be erased. Example: Moving Message 3 in FOLDER01 to FOLDER03 **1** Display the message you want to move. 0:00:00

|05y10m10d 15:10 2 Press ◀ (MENU), and select Ø (Edit) by pressing

▲/▼, and then press ►■. Move MSG The cursor moves to the Edit Alarm None.

3 Press ▲/▼ to select "Move Priority MSG" and press ►■. Move MSG The window for selecting the destination folder is alarm displayed. (**■**□ L _____

4 Press **▲**/**▼** to select the Move MSG folder to which you want | a FOLDER01 to move the message to 亡 FOLDER02 and press ►■. 🗀 FOLDER03 The window for moving the message is displayed. The message is played back from Move MSG the beginning.

and press ►■. The message is moved to the destination folder. Messages are sorted in order of the recorded date and time.

6 Press ■STOP to exit the menu mode.

5 Press **▲**/▼ to select "Yes"

Yes No

₾ 002/002 0:00:00 05y10m10d 15:10 You cannot move a message to the other drive.

Execute?

Adding Priority Mark(s) — Priority Mark Function

2 Press ◀ (MENU), and Priority

■None

The setting is finished 6 Press ■STOP to exit the menu mode.

The messages will be renumbere e.g. When there are mark(s) 3 messages in a Messages are sorted in order of the number of priority mark(s) <u>_</u>2001/003 (▲) in a folder. Messages without a priority mark are 0:00:00 moved behind the messages 05y10m15d 13:26 with priority mark(s)

If there are over 2 messages with the same number of priority marks in a ≏±002/003 folder, these messages are sorted by the recorded date and time. (The oldest one comes first.) You can also add priority mark(s) using the supplied "Digital Voice

|05y10m15d 15:20 ·■□Λ. Editor" software. But messages an not sorted in order of the number of **△ 003**/003 the priority marks unless you sorted by the number of priority marks 0:00:00 |05y10m15d 10:00| Message 3

♣ Priority

Move MSG

a Alarm

Alarm

AddFolder

0:00:00

► Handling Folders

Adding / Deleting Folders

By default setting, there are 5 folders: "FOLDER01" through "FOLDER05". You can add folders as you like. You can also delete unnecessary folders.

The maximum number of folders you can add varies depending on the using conditions. "Folder Full" is displayed because of the system limitations of the IC recorder.

Adding a folder 1 Press **◄** (MENU), and select @ (Edit) by pressing **▲**/**▼**, and then press -1. The cursor moves to the Edit

Move MSG 2 Press **▲**/**▼** to select "Add Folder" and press ►■. The window for creating a new folder is displayed. **3** Press **△**/**▼** to select "Execute" and press ►■.

||Add Folder Execute Cancel end of the current drive. **4** Press ■STOP to exit the

menu mode. **About added folder names** The new folder is labeled automatically with the icon "and double figures or letter like "FOLDER04" or "FOLDERAB". If there is a missing number or letter among the folder names, the new one is labeled using the missing number or letters automatically. You can change the folder icon and name as you like.

Erasing a folder Display the folder you want to delete. Once a folder has been erased, you cannot retrieve it. When erasing a folder that contains recorded messages,

🚅 Erase a MSG EraseFolder

Cancel

Execute?

Yes

No

pressing **▲**/**▼**, and then press -The cursor moves to the Erase menu. 3 Press **A**/**▼** to select "Erase lErase Folder Folder" and press ►■. ጉFOLDER01 The window for erasing the Execute

folder is displayed. 4 Press **▲**/▼ to select "Execute" and press ▶■. The confirmation window displayed. and press ►■.

2 Press ◀ (MENU), and

select m (Erase) by

rase Folde 5 Press **▲**/▼ to select "Yes" The folder is erased 6 Press ■STOP to return to the normal display.

To cancel erasing Press ■STOP before step 4 You cannot delete the last folder left in a drive. • After deleting a folder, the name of the remaining folders are not changed. If "FOLDER03" is erased, for example, the name of "FOLDER04" will remain the same.

• If the folder contains recorded message, "Messages in folder will be erased" will be displayed. If you do, the folder and **Editing an Icon and Name of a** Folder

You can label an icon or name of a folder vourself.

® Registered templates of folder icons and names Folder icons and names registered as templates are associated with each other. When you select a folder icon or name, the folder name associated with the folder icon, or the folder icon associated with the folder name is automatically selected. When you re-select or edit the identical folder icon and name, they will no longer be associated. Some icons have no associated names. Schedule, Meeting, Memo, La Bz Trip, Lecture, Arraining, A Speech, Action,

Personal, 🖣 Idea, 🛗 Shopping, 🎝 Music, 🛗 Travel, 🦣 Lesson, 💬 Message, 🖫 Expense, 📑 Research, 💺 Exhibition, 🗯 Report, 👺 Sports, 🗘 Date, 🛨 Party, 🌄

Folders have been automatically attached with the folder

icon "_". You can select the desired folder icon from the

1 Display the folder you want to change the 2 Press ◀ (MENU), and Priority

₩ Move MSG pressing **▲**/**▼**, and then aAlarm press -1. The cursor moves to the Edit •■□[|] ----3 Press **▲**/**▼** to select "Edit Folder" and press ►■. The window for editing a

Changing a folder icon

select 🔗 (Edit) by

folder is displayed.

Edit Folder Name

4 Press **▲**/▼ to select "lcon" and press ►■. The window for selecting a folder icon is displayed

folder icon.

(▲/▼/◀/▶).

6 Press ►■.

The cursor moves to the

direction you press the key

▼, you can scroll the pages.

The folder is labeled with the

icons and names will not be associated.

Changing a folder name

Depending on the folder icon you choose, there is no

ssociated name. If you edit folder icons and names, folder

Folders have been labeled automatically with double

you can label folders as you like by using template

1 Display the folder you want to change the

figures or letter like "FOLDER04" or "FOLDERAB", but

The setting is finished

7 Press ■STOP to exit the

selected icon and its

associated name.

2 Press ◀ (MENU), and

select 🔗 (Edit) by

pressing **▲**/**▼**, and then

The cursor moves to the Edi

Folder" and press ►■.

"Name" and press ▶■.

The window for selecting a

folder name is displayed.

folder name and press

The folder is labeled with the

You can also label a folder using the supplied "Digital Voice

Editor" software. For the details, see the help of the Digital

Voice Editor. Some characters that the unit does not support

► Expanding the Memory with the

Inserting the "Memory Stick"

Stick Duo" or "Memory Stick PRO Duo" into the

• Do not insert or remove the "Memory Stick" while a

• Do not insert a "Memory Stick" in a different direction. It

When you insert the "Memory Stick" for the first

purchasing or one with no data, 5 folders (FOLDER01 to

• The unit is accessing data while "ACCESS" appears in the

or orange. While accessing, do not remove the "Memory

If the unit is required to process excessive amount of data,

"ACCESS" may be displayed for an extended period of

time. This is not a malfunction of the unit. Wait until the

Make sure that "ACCESS" disappears, and the unit is in the stop mode. Then push the "Memory Stick" into the

unit. When it pops out, remove it from the slot as shown

Removing the "Memory Stick"

display window or the OPR indicator lights or flashes in red

Stick", the batteries or AC adaptor (not supplied). Doing so

Doing so may cause malfunction of the unit.

may cause malfunction of the unit.

time (initializing the memory)

Notes while "ACCESS" appears

may damage the data.

"ACCESS" appears in the display window

If you insert a "Memory Stick" for the first time af

FOLDER05) will be made in the "Memory Stick"

Make sure to insert the "Memory Stick" firmly

ssage of the built-in memory is recorded or played back

You can expand the memory by inserting the "Memory

6 Press ■STOP to exit the

selected name and its

menu mode.

associated icon.

will not be displayed properly

MEMORY STICK slot.

"Memory Stick"

5 Press **▲**/**▼** to select a

The window for editing a

3 Press **△**/**▼** to select "Edit

folder is displayed.

4 Press **A**/▼ to select

menu mode.

TOLDER01 3 ... 🗈 🛨 🗗 品品区分!

5 Press ▲/▼/◀/▶ to select a ☐ FOLDER01 5 m **6** + 2 |黒盆区の! | 🖰 🛂 🗗 🕮 🦈 When you keep pressing ▲/

001/012

05v10m 7d 15:09

Priority [Priority]

≸Move MSG

None]

Edit Folder

~ FOLDER01

Schedule

Meeting

[001 05.10. 7 15:09]

0003 05.10.25 10:00

In the list view

Memo

lि≘¹ Memo

Name

alarm

0:00:00

STU

 "Memory Stick": "Memory Stick" can store all types of data except for the one that requires the "MagicGate" copyright protection technology "Memory Stick" (MagicGate/High-Speed Transfer Compatible): "Memory Stick" (MagicGate/High-Speed Transfer Compatible) employs "MagicGate" copyright protection technology and supports high speed data transfer. It can be used with all the "Memory Stick"-compatible devices, (Data transfer speed depends on the "Memory Stick"-compatible

 "MagicGate Memory Stick": "MagicGate Memory Stick "employs the "MagicGate" copyright protection

with "MagicGate" copyright protection technology.

• "Memory Stick-ROM": "Memory Stick-ROM" is the read-only "Memory Stick" storing the data. You cannot save or delete its data. What is "MagicGate"?

'MagicGate" is a copyright protection technology for "MagicGate Memory Stick" and compliant products. The unit does not support the "MagicGate" standards and cannot read or write the data subject to the "MagicGate" copyright Notes on use

• When you slide the write-protect switch to the write

protect position, you cannot record, edit, or delete the data. (Some types of "Memory Stick Duo" are not equipped with write-protect switch.) Connector _____ **4**

Write-protect switch Place the label here · Avoid removing the "Memory Stick" from the unit while the unit is reading or writing data

is removed.

 Data may be damaged in such occasions While the unit is reading or writing data, the "Memory Stick" is removed or the batteries are removed. Or the AC power adaptor (not supplied)

The "Memory Stick" is used in a location subject to electrostatic or electronic noises We recommend that you save backup of the important

'Memory Stick" is shipped with a FAT format as the

Notes on formatting (initializing)

standard format. To format "Memory Stick", use devices conformable with the "Memory Stick". When you format "Memory Stick", always perform the procedures in "Formatting the Memory" We cannot guarantee operations if the "Memory Stick" is

formatted on your PC About the minimum recording unit When recording a message in the "Memory Stick", the relevant information of the message, the number of folders, or others is recorded in addition to the message itself. As the number of messages or folders increase, the remaining memory reduces accordingly. To record a message or add a folder, you need the time of the minimum recording unit. Although the actual recording time of a message may be less than that of the minimum recording unit, the time of the message is

you cannot add a message or a folder in the "Memory The minimum recording unit in each recording

If the remaining recording time of the inserted "Memory

Stick" is less than that of the minimum recording unit,

ST	8 seconds
STLP	8 seconds
SP	8 seconds
LP	22 seconds

▶ Other Operations

counted as a minimum recording unit.

Formatting the Memory You can format the built-in memory and a "Memory Stick Duo" or "Memory Stick PRO Duo" inserted in the MEMORY STICK slot. Formatting will delete all the data recorded in the memory including images and other data.

Before formatting, check the data in the memory

Because a commercially available "Memory Stick" has already been formatted at the factory, you do not need to format a **1** Press **◄** (MENU), and 🚇 EraseAlIMSG select 🏢 (Erase) by EraseFolder pressing **▲**/**▼**, and then Format

=0 _____

Built-in

MemoryStick

ormat

Format

Format

Format

lRuilt−in

Execute

Execute?

Yes

No

Formatting

Cancel

The cursor moves to the Erase menu 2 Press **▲**/**▼** to select 'Format" and press ►■. The window for selecting the memory to be formatted is

displayed. When the "Memory Stick" is not inserted, this window does not appear. Skip to step 4. **3** Press **▲**/**▼** to select the media ("Built-In" or "Memory Stick") that you want to format and press

5 Press **A**/▼ to select "Yes"

Formatting of the selected

first time after purchasing.

"Memory Stick" is set to "LOCK".

Select "Cancel" in step 4 or "NO" in step 5.

To cancel formatting

Software

hard disk.

supplied).

Connection

IC Recorder

software operating instructions

To USB

the IC recorder with your PC.

connector

(supplied)

6 Press ■STOP to return to the normal display.

FOLDER05) are automatically made in the memory

in the same way when you insert batteries for the

After formatting, 5 folders (FOLDER01 to

You cannot format when the write-protect switch on the

Using the "Digital Voice Editor"

By connecting the IC recorder to your computer, you can

• Saving the IC recorder messages on your computer's

• Transferring the PC messages back to the IC recorder.

• Sending a voice e-mail message using MAPI e-mail

• Transcribing your IC recorder message using Dragon

For the details, see the supplied "Digital Voice Editor 2"

Use the USB connecting cable supplied to connect the

USB connectors of the IC recorder and your computer.

USB connecting cable

When the unit is connected to the PC, "PC Connect"

recognized as an IC recorder and the "Memory Stick" is

recognized as a removable disk. You can use Windows

To set the clock of the unit automatically

Set "Date&Time" in the menu to "Automatic" an

started. The clock of the unit is automatically set according to the internal clock of your PC

appears on the display window and you can recognize

When you connect the unit to your PC, the built-in memory is

xplorer to display the data stored in the built-in memory or

"Memory Stick". When playing, editing, or saving a messag

however, please make sure to use the supplied Digital Voice

connect the unit to the PC after the Digital Voice Editor is

To USB connector

NaturallySpeaking® speech-recognition software (not

· Playing or editing the messages on your computer

use the "Digital Voice Editor" software to do the

and press ►■.

media starts.

The window for executing format is displayed. 4 Press **▲**/▼ to select "Execute" and press ►■. The confirmation window is displayed.

Maximum recording time and number of messages* (in a "Memory Stick") ST** STLP** SP** LP** 32MB 1 h, 25 m, 2 h, 45 m, 4 h, 20 m, 11 h, 45 m, 64MB 2 h. 50 m. 5 h. 35 m. 8 h. 50 m. 23 h. 35 m. 128MB 5 h. 50 m. 11 h. 10 m. 17 h. 45 m. 47 h. 25 m. 256MB 11 h. 10 m. 21 h. 35 m. 34 h. 10 m. 91 h. 10 m. 512MB 22 h. 5 m. 42 h. 35 m. 67 h. 25 m. 179 h. 45 m.

 $1GB \qquad 44 \ h. \ 55 \ m. \quad 86 \ h. \ 25 \ m. \quad 136 \ h. \ 50 \ m. \ 364 \ h. \ 55 \ m.$ (h.: hours/m.: minutes) In continuous recording/playback

In approximate hours and minutes * The maximum number of messages in a folder is 999. When there are 5 folders in the "Memory Stick", you can record up to 1,012 messages **Recording modes: ST: Standard play stereo recording mode/STLP: Long play

stereo recording mode/SP: Standard play monaural

When you use the "Memory Stick", the battery life may be The above table shows the recording time when you use the 'Memory Stick" for use with ICD-MX20 only and by the

initial setting with 5 folders. The maximum recording time

and number of messages may differ depending on the using

recording mode/LP: Long play monaural recording mode

conditions. The maximum recording time of a "Memory Stick Duo" varies depending of the media type. Using the "Memory Stick" (not supplied) with the unit When you purchase "Memory Stick", make sure that you select 32MB, 64MB, or 128MB "Memory Stick Duo" with a logo MEMORY STICK DUO, or 256MB,

512MB, or 1GB "Memory Stick PRO Duo" with a

About the "Memory Stick" What is "Memory Stick"? "Memory Stick" is small, light-weighted, and next-

logo Memory Stick PRO Duo.

generation IC storage media with a larger capacity than a floppy disc. You can use the "Memory Stick" to exchange data among "Memory Stick" compatible devices. In addition, you can use the "Memory Stick" as a removable external storage device to save your data. In a "Memory Stick", you can save image data from other device in addition to the sound files of the IC recorder. Sizes of "Memory Stick"

There are two sizes of "Memory Stick": regular size

"Memory Stick" and compact size "Memory Stick Duo"

With a Duo adaptor, you can use "Memory Stick Duo" on a device supporting regular size "Memory Stick". For ICD-MX20, use a "Memory Stick Duo" or "Memory Stick PRO Duo" (compact size "Memory Stick Duo"). Types of "Memory Stick" following types of "Memory Stick" are available for poses. "Memory Stick Duo" and "Memory

Stick PRO Duo" are the only media supported by ICD-

MX20.

 "Memory Stick PRO": "Memory Stick PRO" employs the "MagicGate" copyright protection technology and can be used only with "Memory Stick PRO" compliant "Memory Stick-R": Data stored in "Memory Stick-R" **System requirements** cannot be overwritten. It can be used on "Memory Stick-R" compatible devices. You cannot store data

Your computer and system software must meet the following minimum requiren

- CD-ROM drive

- USB port

• IBM PC/AT or compatible CPU: 266MHz Pentium® II processor or higher RAM: 64MB or more

size and number of sound files you store

Sound board: Sound Blaster 16 compatible

OS: Microsoft® Windows® XP Media Center Edition

Windows® XP Media Center Edition/Windows® XP

Windows® 2000 Professional/Windows® Millennium

2005/Windows® XP Media Center Edition 2004

Edition/Windows® 98 Second Edition standard

Windows® 98, Windows® 95 or Windows® NT.)

· You cannot use the software with a Macintosh machine

system is installed or upgraded by the user, or a compu

• Operate the unit only on 3 V DC. Use two LR03 (size

Do not leave the unit in a location near heat sources, or

in a place subject to direct sunlight, excessive dust or

Should any solid object or liquid fall into the unit,

remove the batteries and have the unit checked by

qualified personnel before operating it any further

Noise may be heard when the unit is placed near an

Noise may be recorded when an object, such as your

moistened in water. Do not use alcohol, benzine or

If you place a magnetic card near the speaker of the

unit, the card may be affected by the magnet of the

If you have any questions or problems concerning your

recorder, we recommend that you save a backup copy

of your recorded messages on a tape recorder or to a

There are some system limitations of the unit. Troubles as

• If you record messages in a mixture of ST, STLP, SP

and LP modes, the recordable time varies from the

• There may be other formatted data (for example

maximum ST mode recording time to the maximum

Since you need the minimum recording unit to record

a message even shorter than the minimum recording

unit, the actual total recording time may become

shorter than the maximum recording time of the IC

· The maximum recording time varies depending on the

No more recording can be made when 999 messages

the counter (elapsed time) and the remaining time

mentioned above, the sum of the total recorded time in

becomes shorter than the maximum recording time of

• You cannot divide a message in a folder which has 999

If an Error Message is displayed

If the following error messages are displayed, do the

Should any problem persist after you have made these

• You set the alarm to play back a message at the date

• Batteries are weak. Replace batteries with new ones.

When the remaining batteries are short, you cannot

• The file is not supported by the unit, or the file itself is

• The unit does not support the file type of the selected

computer. You cannot edit or erase "Read-only" messages and folders. Remove the check for "Read-

Because there are already the maximum number of

Delete some unnecessary folders. Or switch to the

folders in the selected drive, you cannot add a folder.

· Because there are already 999 messages in the selected

• The remaining memory of the built-in memory or the

'Memory Stick" is too small. Erase some messages

• Insert the "Memory Stick" again. After inserting, if this

message is displayed again, the inserted "Memory

The write-protect switch on the inserted "Memory

format in this condition. Slide the switch to the

Stick" is set to "LOCK". You cannot record, edit or

• The selected folder does not have any messages. Or,

the selected drive does not have any folders. Without

messages or folders, you cannot set the alarm or do

You cannot erase the last folder remained in the drive.

• You set the alarm at the past date and time. Set the

You cannot use the "Memory Stick" formatted with

other devices . Use the "Format" in the menu to format

An AC power adaptor that is not compatible with the

IC recorder is connected. Make sure to use the AC

power adaptor for the unit (not supplied). Or insert

• Batteries are weak. Replace batteries with new ones.

The "Memory Stick" has been set to "Read-only". You

'Memory Stick". Release the "Read-only" setting.

· The IC recorder failed in memory access because the

memory is corrupted or a system error occurred

cannot edit or erase messages of a "Read-only"

alarm at an appropriate date and time.

Please format with the unit.

folder, you cannot add a message. Erase some

messages before adding or dividing a message.

message. You cannot play back or edit the file.

• Messages have been set to "Read-only" in the

and time previously set on another message. Change

• If you divide messages frequently, the unit may

• Due to the limitation of the IC recording system

unit, please consult your nearest Sony dealer.

To avoid potential risk of data loss caused by

On system limitations of the IC

mentioned below are not malfunctions of the unit

You cannot record messages up to the

maximum recording time.

LP mode recording time.

images) in the memory.

number of folders or messages

You cannot divide a message.

become unable to divide a message.

checks, consult your nearest Sony dealer.

Alarm already set for the same time.

erase a message or format the memory.

remedies described here.

Battery Low

Data not supported

File not supported

Maximum Folders

Memory Full

Memory Stick Error

Stick" may be out of order.

Memory Stick is locked.

writable position.

No Folder/Message

other operations.

Past date and time.

the "Memory Stick".

the batteries

Replace Batteries

Power Supply Problem

Read-only Memory Stick

Only one folder remains.

Folder/File is protected.

only" under "Properties" of files.

drive with sufficient memory space.

Maximum Messages: Folder Full

each have been recorded in a folder.

accidental operation or malfunction of the IC

speaker and may become unusable. Please keep a

finger, etc., rubs or scratches the unit during recording

AC power source, a fluorescent lamp or a mobile

phone during recording or playback.

To clean the exterior, use a soft cloth slightly

magnetic card away from the unit.

Backup recommendations

• Do not operate the unit while driving, cycling or

with multi-boot operating environment are not supported

• A handmade computer, a computer whose operating

▶ Other Information

Precautions

On safety

On handling

mechanical shock.

On maintenance

computer, etc.

recorder

recorder.

AAA) alkaline batteries

operating any motorized vehicle.

installation (You cannot use this software with

Professional/Windows® XP Home Edition/

Display: High color (16 bits) or more and 800 x 480

Built-in flash memory 32MB/"Memory Stick - Hard disk space: 70MB or more depending on the Recording time • ST:

Recording media

Duo", Stereo/Monaural recording 1 hours 25 minutes • STLP: Approx. 2 hours 45 minutes Approx. 4 hours 20 minutes

• ST: 60 Hz - 13,500 Hz • STLP: 60 Hz - 7,000 Hz 60 Hz - 7.000 Hz

Power output 350 mW

Input/Output • Microphone jack (minijack, stereo) input for plug in power, minimum input

Playback speed control (DPC) +100% to -50%

Two LR03 (size AAA) alkaline batteries: 3 $\rm V$

Mass (including batteries)

96 g (3.4 oz) Operating instructions (For the IC recorder (1)/For the application software (1)) Stereo headphones (1)

LR03 (size AAA) alkaline batteries (2) Carrying pouch (1) Dragon NaturallySpeaking® Preferred (Version 8.0) CD-ROM(1) supplied only with ICD-MX20VTP sold in the USA Optional accessories ECM-TL1/Audio connecting cable RK-

(512 MB), MSX-M1GN (1 GB) /PC Card Adaptor for Memory Stick MSAC-PC3

Specifications

• LP: Approx. 11 hours 45 minutes

Frequency range

• LP: 60 Hz - 3,500 Hz Speaker approx. 2.8 cm ($1^{1}/_{8}$ in.) dia.

level 0.6 mV, 3 kilohms or lower impedance microphone Headphones jack (minijack, stereo)

- output for 8 - 300 ohms headphones USB connector

• "Memory Stick Duo" slot • DC IN 3V jack

Dimensions (w/h/d) (not including projecting parts and $36.6 \times 107.5 \times 16.9 \text{ mm} \left(1^{1}/_{2} \times 4^{1}/_{4} \times 11/_{16} \text{ in.}\right)$

Supplied accessories

USB connecting cable (1) Application Software (CD-ROM) (1)

Stereo headphones MDR-EX71SL, MDR-E931LP/Active speaker SRS-T88, SRS-T80 Electret condenser microphone ECM-CS10, G134HG, RK-G135HG, RK-G136HG, RK-G139HG (excluding Europe)/AC power adaptor AC-E30HG (excluding the models for Korea, the People's Republic of China, Australia, and New Zealand),/"Memory Stick Duo" MSH-M32N (32 MB), MSH-M64N (64 MB), MSH-M128N (128 MB)/"Memory Stick PRO Duo" MSX-M256S (256 MB), MSX-M512S (512 MB)/High Speed "Memory Stick PRO Duo" MSX-M256N (256 MB), MSX-M512N

Your dealer may not handle some of the above listed optional accessories. Please ask the dealer for detailed information.

Design and specifications are subject to change without